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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/769,691	01/30/2004	Eric Justin Gould Bear	MSFT-3471/304033.02	8609
41505	7590	03/14/2011	EXAMINER	
WOODCOCK WASHBURN LLP (MICROSOFT CORPORATION) CIRA CENTRE, 12TH FLOOR 2929 ARCH STREET PHILADELPHIA, PA 19104-2891			MCDOWELL, JR, MAURICE L	
			ART UNIT	PAPER NUMBER
			2628	
			NOTIFICATION DATE	DELIVERY MODE
			03/14/2011	ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

eofficemonitor@woodcock.com

<b>Office Action Summary</b>	<b>Application No.</b> 10/769,691	<b>Applicant(s)</b> BEAR ET AL.	
	<b>Examiner</b> MAURICE MCDOWELL, JR	<b>Art Unit</b> 2628	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1)  Responsive to communication(s) filed on 04 January 2011.
- 2a)  This action is **FINAL**.
- 2b)  This action is non-final.
- 3)  Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4)  Claim(s) 1-6,9-17,20-28,31-39 and 42-44 is/are pending in the application.
  - 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5)  Claim(s) \_\_\_\_\_ is/are allowed.
- 6)  Claim(s) 1-6,9-17,20-28,31-39 and 42-44 is/are rejected.
- 7)  Claim(s) \_\_\_\_\_ is/are objected to.
- 8)  Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9)  The specification is objected to by the Examiner.
- 10)  The drawing(s) filed on \_\_\_\_\_ is/are: a)  accepted or b)  objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11)  The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12)  Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a)  All    b)  Some \*    c)  None of:
    - 1.  Certified copies of the priority documents have been received.
    - 2.  Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    - 3.  Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1)  Notice of References Cited (PTO-892)
- 2)  Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3)  Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4)  Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 5)  Notice of Informal Patent Application
- 6)  Other: \_\_\_\_\_.

## **DETAILED ACTION**

### **Response to Arguments**

1. Applicant's arguments filed 1/14/2011 have been fully considered but they are not persuasive.
2. Applicant argues: Applicants respectfully disagree with the assertion that Tenhunen's logical buttons are remapped based on the orientation of the images presented on the display. As stated in Tenhunen at paragraph [0020], Tenhunen uses a state sensor "which is arranged to sense the normal operating position of the mobile station and the corresponding essentially upsidedown operating position." Thus Tenhunen does not remap logical buttons based on "the detection of the change in orientation relative to the display of the images presented on the display" as claimed in claim 1, but instead detects a change in orientation of the device itself.
3. Examiner respectfully disagrees: Tenhunen does remap logical buttons based on "the detection of the change in orientation relative to the display of the images presented on the display"; as previously argued by the examiner in earlier office actions (for example see action dated 1/28/2010) when the orientation of a display is changed its state must be checked prior to making any changes (landscape to portrait or visa-versa), therefore when the tilt sensor detects a change in position of the device, it is the same as detecting a change in orientation of the images presented on a display because the orientation will never change without first checking the current state of the orientation of the image (portrait or landscape); if the tilt sensor was exclusively relied upon to control the display without first checking the state of the display, then the orientation of the images would only show correctly half of the time. As a result the logical buttons in Tenhunen are remapped based on the orientation of the images presented on the

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display. This argument also applies to any of applicant's similar arguments that were directed to Hinckley, because Hinckley like Tenhunen inherently teaches "detecting a change in orientation, relative to the display, of an image as displayed on the display from the first orientation to a second orientation at the computing device."

4. Applicant argues: Moreover, while Tenhunen's logical buttons may be configured to execute one of two command calls, such buttons are only configured to execute one command call in any particular orientation. For example, as shown in the cited figures Tenhunen, and as noted in the office action, when Tenhunen's device is in a normal orientation, the logical '1' button is configured only to execute a "dial 1" command call, and is not configured to execute a "dial #" command call. When the device is in an upside down orientation, the logical '1' button is configured only to execute a "dial #" command call, and is not configured to execute a "dial 1" command call. In contradistinction, claim 1 discloses configuring a logical button to execute a first command call and a second command call when the computing device is in a first orientation.

5. Examiner respectfully disagrees: Tenhunen does teach the above limitation see detailed action below.

### **Claim Rejections - 35 USC § 103**

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

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having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1-2, 4-6, 9, 12-13, 15-17, 20, 23-24, 26-28, 31, 34-35, 37-39, 42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hinckley et al. Pub. No.: US 2002/0021278 A1 in view of Tenhunen et al. Pub. No.: US 2002/0198029 A1.

8. Regarding claim 1, Hinckley teaches: A method for logically remapping commands to logical buttons of a computing device comprising a display, said logical buttons having associated commands, said method comprising: detecting a change in orientation, relative to the display, of an image as displayed on the display from the first orientation to a second orientation at the computing device (figs. 10 and 11 see also [0072] [0073]).

9. Hinckley doesn't teach: configuring a first logical button from among said logical buttons to execute, upon activation of the first logical button, a first command call and a second command call at the computing device when the computing device is in a first orientation; responsive to the detection of the change in orientation of the image, automatically logically remapping the commands to the logical buttons based on the second orientation of the images presented on the display by configuring a second logical button from among said logical buttons to execute, upon activation of the second logical button, the first command call and the second command call when the computing device is in the second orientation.

10. The analogous prior art Tenhunen teaches: configuring a first logical button from among said logical buttons to execute, upon activation of the first logical button, a first command call and a second command call at the computing device when the computing device is in a first orientation (figs. 1a-c see also [0019] and [0023]) (The first logical button '4' for example in

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figs. 1a and 1c is configured upon activation to execute a first command call (dial 4) and a second command call (display the number 4 which was previously a 9)); responsive to the detection of the change in orientation of the image, automatically logically remapping the commands to the logical buttons based on the second orientation of the images presented on the display by configuring a second logical button from among said logical buttons to execute, upon activation of the second logical button, the first command call and the second command call when the computing device is in the second orientation (figs. 1a-c see also [0019] and [0023]) (The second logical button '9' in figs. 1a and 1c is configured upon activation to execute a first command call (dial 9) and a second command call (display the number 9 which was previously a 4)) for the benefit of to create a mobile station including a keypad, which is easier and more stable to use than previously, especially with one hand, and which can be adapted faster and more simply to different operating situations.

11. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine configuring a first logical button from among said logical buttons to execute, upon activation of the first logical button, a first command call and a second command call at the computing device when the computing device is in a first orientation; responsive to the detection of the change in orientation of the image, automatically logically remapping the commands to the logical buttons based on the second orientation of the images presented on the display by configuring a second logical button from among said logical buttons to execute, upon activation of the second logical button, the first command call and the second command call when the computing device is in the second orientation as shown in Tenhunen with Hinckley for the benefit of to create a mobile station including a keypad, which is easier and more stable to

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use than previously, especially with one hand, and which can be adapted faster and more simply to different operating situations.

12. Regarding claim 2, Hinckley teaches: The method wherein the display is a visual display device (figs. 10 and 11).

13. Regarding claim 4, Hinckley teaches: The method wherein the display is one from the group comprising: a visual display device, an audio display device, and a tactile display device (figs. 10 and 11).

14. Regarding claim 5, Hinckley teaches: The method further comprising detecting a change in orientation of the display at the computing device and, responsive to the detection of the change in orientation of the display, automatically changing the orientation, relative to the display, of the image as displayed on the display (figs. 10 and 11 see also [0072] [0073]).

15. Regarding claim 6, Hinckley teaches: The method further comprising detecting a command to change the orientation, relative to the display, of the image presented on the display from the first orientation to the second orientation at the computing device and, responsive to the detection of the command, automatically changing the orientation, relative to the display, of the image as displayed on the display from the first orientation to the second orientation (figs. 10 and 11 see also [0072] [0073]).

16. Regarding claim 9, Tenhunen further teaches: The method wherein, if the computing device is symmetrical both vertically and horizontally, the logical remapping rotates the commands to the logical buttons (figs. 1a-c).

17. Regarding claim 12, Hinckley teaches: A user interface system for logically remapping commands to logical buttons of a computing device having a display, said logical buttons having

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associated commands, said system comprising: a subsystem for detecting a change in orientation, relative to the display, of an image as displayed on the display from the first orientation to a second orientation (figs. 10 and 11 see also [0072] [0073]).

18. Hinckley doesn't teach: a subsystem for configuring a first logical button from among the logical buttons to execute, upon activation of the first logical button, a first command call and a second command call when the computing device is in a first orientation;

a subsystem for, responsive to the detection of the change in orientation of the image, automatically logically remapping the commands to the logical buttons based on the second orientation of the display by configuring a second logical button from among the logical buttons to execute, upon activation of the second logical button, the first command call and the second command call when the computing device is in the second orientation.

19. The analogous prior art Tenhunen teaches: a subsystem for configuring a first logical button from among the logical buttons to execute, upon activation of the first logical button, a first command call and a second command call when the computing device is in a first orientation (figs. 1a-c see also [0019] and [0023]);

a subsystem for, responsive to the detection of the change in orientation of the image, automatically logically remapping the commands to the logical buttons based on the second orientation of the display by configuring a second logical button from among the logical buttons to execute, upon activation of the second logical button, the first command call and the second command call when the computing device is in the second orientation (figs. 1a-c see also [0019] and [0023]) for the benefit of to create a mobile station including a keypad, which is easier and



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more stable to use than previously, especially with one hand, and which can be adapted faster and more simply to different operating situations.

20. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine a subsystem for configuring a first logical button from among the logical buttons to execute, upon activation of the first logical button, a first command call and a second command call when the computing device is in a first orientation; a subsystem for, responsive to the detection of the change in orientation of the image, automatically logically remapping the commands to the logical buttons based on the second orientation of the display by configuring a second logical button from among the logical buttons to execute, upon activation of the second logical button, the first command call and the second command call when the computing device is in the second orientation as shown in Tenhunen with Hinckley for the benefit of to create a mobile station including a keypad, which is easier and more stable to use than previously, especially with one hand, and which can be adapted faster and more simply to different operating situations.

21. Regarding claim 13, Hinckley teaches: The user interface system wherein the display is a visual display device (figs. 10 and 11).

22. Regarding claim 15, Hinckley teaches: The user interface system wherein the display is one from the group comprising: a visual display device, an audio display device, and a tactile display device (figs. 10 and 11).

23. Regarding claim 16, Hinckley teaches: The user interface system wherein, further comprising a subsystem for detecting a change in orientation of the display, and a subsystem for, responsive to the detection of the change in orientation of the display, automatically changing the

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orientation, relative to the display, of the image as displayed on the display (figs. 10 and 11 see also [0072] [0073]).

24. Regarding claim 17, Hinckley teaches: The user interface system further comprising a subsystem for detecting a command to change the orientation, relative to the display, of the image presented on the display from the first orientation to the second orientation, and a subsystem for, responsive to the detection of the command, automatically changing the orientation, relative to the display, of the image as displayed on the display from the first orientation to the second orientation (figs. 10 and 11 see also [0072] [0073]).

25. Regarding claim 20, Tenhunen further teaches: The user interface system wherein, if the computing device is symmetrical both vertically and horizontally, the logical remapping rotates the commands to the logical buttons (figs. 1a-c).

26. Regarding claim 23, Hinckley teaches: A computer-readable medium having computer-readable instructions for logically remapping commands to logical buttons of a computing device comprising a display, said logical buttons having associated commands, said instructions comprising instructions for: detecting a change in orientation, relative to the display, of an image as displayed on the display from first orientation to a second orientation (figs. 10 and 11 see also [0072] [0073]).

27. Hinckley doesn't teach: configuring a first logical button from among the logical buttons to execute, upon activation of the first logical button, a first command call and a second command call when the computing device is in a first orientation; responsive to the detection of the change in orientation of the image, automatically logically remapping the commands to the logical buttons based on the second orientation of the display by

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configuring a second logical button from among the logical buttons to execute, upon activation of the second logical button, the first command call and the second command call when the computing device is in the second orientation.

28. The analogous prior art Tenhunen teaches: configuring a first logical button from among the logical buttons to execute, upon activation of the first logical button, a first command call and a second command call when the computing device is in a first orientation (figs. 1a-c see also [0019] and [0023]);

responsive to the detection of the change in orientation of the image, automatically logically remapping the commands to the logical buttons based on the second orientation of the display by configuring a second logical button from among the logical buttons to execute, upon activation of the second logical button, the first command call and the second command call when the computing device is in the second orientation (figs. 1a-c see also [0019] and [0023]) for the benefit of to create a mobile station including a keypad, which is easier and more stable to use than previously, especially with one hand, and which can be adapted faster and more simply to different operating situations.

29. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine configuring a first logical button from among the logical buttons to execute, upon activation of the first logical button, a first command call and a second command call when the computing device is in a first orientation;

responsive to the detection of the change in orientation of the image, automatically logically remapping the commands to the logical buttons based on the second orientation of the display by configuring a second logical button from among the logical buttons to execute, upon activation

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of the second logical button, the first command call and the second command call when the computing device is in the second orientation as shown in Tenhunen with Hinckley for the benefit of to create a mobile station including a keypad, which is easier and more stable to use than previously, especially with one hand, and which can be adapted faster and more simply to different operating situations.

30. Regarding claim 24, Hinckley teaches: The computer-readable medium wherein the display is a visual display device (figs. 10 and 11).

31. Regarding claim 26, Hinckley teaches: The computer-readable medium wherein the display is one from the group comprising: a visual display device, an audio display device, and a tactile display device (figs. 10 and 11).

32. Regarding claim 27, Hinckley teaches: The computer-readable medium wherein the instructions further comprise instructions for detecting a change in orientation of the display and, responsive to the detection of the change in orientation of the display, automatically changing the orientation, relative to the display, of the image as displayed on the display (figs. 10 and 11 see also [0072] [0073]).

33. Regarding claim 28, Hinckley teaches: The computer-readable medium wherein the instructions further comprise instructions for detecting a command to change the orientation, relative to the display, of the image as displayed on the display from the first orientation to the second orientation and, responsive to the detection of the command, automatically changing the orientation, relative to the display, of the image as displayed on the display from the first orientation to the second orientation (figs. 10 and 11 see also [0072] [0073]).

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34. Regarding claim 31, Tenhunen further teaches: The computer-readable medium wherein, if the computing device is symmetrical both vertically and horizontally, the logical remapping rotates the commands to the logical buttons (figs. 1a-c).

35. Regarding claim 34, Hinckley teaches: A hardware control device for implementing a method of logically remapping commands to logical buttons of a computing device comprising a display, said logical buttons having associated commands, said computing device further comprising: the component further configured to detect a change in orientation, relative to the display of an image as displayed on the display from the first orientation to a second orientation (figs. 10 and 11 see also [0072] [0073]).

36. Hinckley doesn't teach: a component configured to configure a first logical button from among the logical buttons to execute, upon activation of the first logical button, a first command call and a second command call when the computing device is in a first orientation; and responsive to the detection of the change in orientation of the image, automatically logically remap the commands to the logical buttons based on the second orientation of the display by configuring a second logical button from among said logical buttons to execute, upon activation of the second logical button, the first command call and the second command call when the computing device is in the second orientation.

37. The analogous prior art Tenhunen teaches: a component configured to configure a first logical button from among the logical buttons to execute, upon activation of the first logical button, a first command call and a second command call when the computing device is in a first orientation (figs. 1a-c see also [0019] and [0023]); and

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responsive to the detection of the change in orientation of the image, automatically logically remap the commands to the logical buttons based on the second orientation of the display by configuring a second logical button from among said logical buttons to execute, upon activation of the second logical button, the first command call and the second command call when the computing device is in the second orientation (figs. 1a-c see also [0019] and [0023]) for the benefit of to create a mobile station including a keypad, which is easier and more stable to use than previously, especially with one hand, and which can be adapted faster and more simply to different operating situations.

38. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine a component configured to configure a first logical button from among the logical buttons to execute, upon activation of the first logical button, a first command call and a second command call when the computing device is in a first orientation; and

responsive to the detection of the change in orientation of the image, automatically logically remap the commands to the logical buttons based on the second orientation of the display by configuring a second logical button from among said logical buttons to execute, upon activation of the second logical button, the first command call and the second command call when the computing device is in the second orientation as shown in Tenhunen with Hinckley for the benefit of to create a mobile station including a keypad, which is easier and more stable to use than previously, especially with one hand, and which can be adapted faster and more simply to different operating situations.

39. Regarding claim 35, Hinckley teaches: The hardware control device wherein the display is a visual display device (figs. 10 and 11).

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40. Regarding claim 37, Hinckley teaches: The hardware control device wherein the display is one from the group comprising: a visual display device, an audio display device, and a tactile display device (figs. 10 and 11).

41. Regarding claim 38, Hinckley teaches: The hardware control device wherein, the component is further configured to detect a change in orientation of the display and, responsive to the detection of the change in orientation of the display, automatically changing the orientation, relative to the display, of the image as displayed on the display (figs. 10 and 11 see also [0072] [0073]).

42. Regarding claim 39, Hinckley teaches: The hardware control device wherein, the component is further configured to detect a command to change the orientation, relative to the display, of the image as displayed on the display from the first orientation to the second orientation and, responsive to the detection of the command, automatically changing the orientation, relative to the display, of image as displayed on the display from the first orientation to the second orientation (figs. 10 and 11 see also [0072] [0073]).

43. Regarding claim 42, Tenhunen further teaches: The hardware control device wherein, if the computing device is symmetrical both vertically and horizontally, the logical remapping rotates the commands to the logical buttons (figs. 1a-c).

44. Claims 10-11, 21-22, 32-33, 43-44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hinckley et al. Pub. No.: US 2002/0021278 A1 in view of Tenhunen et al. Pub. No.: US 2002/0198029 A1 further in view of Kfoury et al. Pub. No.: US 2003/0044000 A1.

45. Regarding claim 10, the previous combination of Hinckley and Tenhunen remains as above but doesn't teach: The method wherein, the computing device is symmetrical along a one

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axis, including but not limited to rocking wheels, super wheels, rocking dogbones, and super dogbones, and for reference purposes the one axis is initially oriented vertically, then the commands are logically remapped to the logical buttons, relative to the first orientation.

46. The analogous prior art Kfoury teaches: The method wherein, the computing device is symmetrical along a one axis, including but not limited to rocking wheels, super wheels, rocking dogbones, and super dogbones, and for reference purposes the one axis is initially oriented vertically, then the commands are logically remapped to the logical buttons, relative to the first orientation (figs. 1-4) for the benefit of best accommodating both right and left hand users.

47. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the computing device is symmetrical along a one axis, including but not limited to rocking wheels, super wheels, rocking dogbones, and super dogbones, and for reference purposes the one axis is initially oriented vertically, then the commands are logically remapped to the logical buttons, relative to the first orientation as shown in Kfoury with the previous combination for the benefit of best accommodating both right and left hand users.

48. Regarding claim 11, Kfoury further teaches: The method wherein: if the image as displayed on the display is rotated one quarter to the right, the commands for UP and DOWN are transposed (figs. 2 and 4); if the image as displayed on the display is rotated one half to the right, then the commands for UP and DOWN are transposed, and the commands for PREV and NEXT are transposed (figs. 2 and 3 and 4); and if the image as displayed on the display is rotated three-quarters to the right, then the commands for PREV and NEXT are transposed (fig. 3).

49. Regarding claim 21, Kfoury further teaches: The user interface system wherein, the computing device is symmetrical along a one axis, including but not limited to rocking wheels,



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super wheels, rocking dogbones, and super dogbones, and for reference purposes the one axis is initially oriented vertically, then the commands are logically remapped to the logical buttons, relative to the first orientation (figs. 1-4).

50. Regarding claim 22, Kfoury further teaches: The user interface system wherein: if the image as displayed on the display is rotated one quarter to the right, the commands for UP and DOWN are transposed (figs. 2 and 4); if the image as displayed on the display is rotated one half to the right, then the commands for UP and DOWN are transposed, and the commands for PREV and NEXT are transposed (figs. 2 and 3 and 4); and if the image as displayed on the display is rotated three-quarters to the right, then the commands for PREV and NEXT are transposed (fig. 3).

51. Regarding claim 32, Kfoury further teaches: The computer-readable medium wherein, the computing device is symmetrical along a one axis, including but not limited to rocking wheels, super wheels, rocking dogbones, and super dogbones, and for reference purposes the one axis is initially oriented vertically, then the commands are logically remapped to the logical buttons, relative to the first orientation (figs. 1-4).

52. Regarding claim 33, Kfoury further teaches: The computer-readable medium wherein: if the image as displayed on the display is rotated one quarter to the right, the commands for UP and DOWN are transposed (figs. 2 and 4); if the image as displayed on the display is rotated one half to the right, then the commands for UP and DOWN are transposed, and the commands for PREV and NEXT are transposed (figs. 2-4); and if the image as displayed on the display is rotated three-quarters to the right, then the commands for PREV and NEXT are transposed (fig. 3).

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53. Regarding claim 43, Kfoury further teaches: The hardware control device wherein, the computing device is symmetrical along a one axis, including but not limited to rocking wheels, super wheels, rocking dogbones, and super dogbones, and for reference purposes the one axis is initially oriented vertically, then the commands are logically remapped to the logical buttons, relative to the first orientation (figs. 1-4).

54. Regarding claim 44, Kfoury further teaches: The hardware control device wherein: if the image as displayed on the display is rotated one quarter to the right, the commands for UP and DOWN are transposed (figs. 2 and 4); if the image as displayed on the display is rotated one half to the right, then the commands for UP and DOWN are transposed, and the commands for PREV and NEXT are transposed (figs. 2-4); and if the image as displayed on the display is rotated three-quarters to the right, then the commands for PREV and NEXT are transposed (fig. 3).

55. Claims 3, 14, 25, 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hinckley et al. Pub. No.: US 2002/0021278 A1 in view of Tenhunen et al. Pub. No.: US 2002/0198029 A1 further in view of Kfoury et al. Pub. No.: US 2003/0044000 A1 further in view of Pinder et al. Patent No.: 5,758,267.

56. Regarding claim 3, the previous combination of Hinckley and Tenhunen and Kfoury remains as above but doesn't teach: The method wherein the display is a non-visual display device.

57. The analogous prior art Pinder teaches: The method wherein the display is a non-visual display device (fig. 1) for the benefit of enhancing the functionality of switches or buttons without adding additional buttons and without creating a scheme that is not intuitive to the user.

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58. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the display is a non-visual display device as shown in Pinder with the previous combination for the benefit of enhancing the functionality of switches or buttons without adding additional buttons and without creating a scheme that is not intuitive to the user.

59. Regarding claim 14, Pinder further teaches: The user interface system wherein the display is a non-visual display device (fig. 1).

60. Regarding claim 25, Pinder further teaches: The computer-readable medium wherein the display is a non-visual display device (fig. 1).

61. Regarding claim 36, Pinder further teaches: The hardware control device wherein the display is a non-visual display device (fig. 1).

### **Conclusion**

62. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to MAURICE MCDOWELL, JR whose telephone number is (571)270-3707. The examiner can normally be reached on Mon-Friday 7:30am - 5:00pm Eastern Time.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Xiao Wu can be reached on 571--272-7761. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MM

/XIAO M. WU/  
Supervisory Patent Examiner, Art Unit 2628